



Finding the needles in ‘big data’ haystacks

March 7, 2021

[Finding the needles in ‘big data’ haystacks](#)

by Boian Alexandrov and Velimir “Monty” Vesselinov

A seemingly bottomless ocean of “big data” has flooded our world. Bits and bytes are pouring in from sources ranging from satellites and MRI scans to massive computer simulations and seismic-sensor networks, from security cameras to smartphones, from genome sequencing of SARS-Cov-2 to COVID-19 test results, from social networks to texts zipping from phone to phone.

Making sense of this ever-increasing racket is vital to national security, economic stability, individual health and practically every branch of science – and the job is getting easier, thanks to the SmartTensors artificial intelligence tool we have developed at Los Alamos National Laboratory.

Without any human guidance, this technology sifts through millions of millions of bytes of diverse data to find the hidden patterns and features that make the data understandable, revealing its underlying processes or causes. SmartTensors also can identify just how many features are needed to make sense of enormous, multidimensional datasets.

Read the rest of the story as it appeared in the [Albuquerque Journal](#).

Los Alamos National Laboratory

www.lanl.gov

(505) 667-7000

Los Alamos, NM

Managed by Triad National Security, LLC for the U.S Department of Energy's NNSA

